

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-21 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable based on US 5,892,758 (Argyroudis) and US 6,710,721 (Holowick) and WO 01/74045 (Clarke). This rejection is respectfully traversed.

Argyroudis discloses a wireless remote telemetry system. As disclosed at the top of column 9, the reporting times of the remote metering units 102a-102n can be scheduled actively by the central controller 116 to prevent message reporting overload and message collisions. The central controller 116 generates scheduling messages for delivery to each remote metering unit 102a-102n. These messages are transmitted over a paging channel 104 of the wireless communication system. Examples of scheduling messages are a broadcast instruction for each remote metering unit 102a-102n to transmit their respective reporting messages at a randomly selected time. Another example is a specific interrogation of a specific remote metering unit 102a.

Argyroudis's active scheduling does not teach a concentrator "transmitting program data including information defining a sequence of program instructions" to a remote meter. The scheduling messages in Argyroudis are not a sequence of program instructions. Rather, the scheduling messages simply carry parametric data such as the reporting times to be observed by the remote metering units. This is fundamentally different from the claimed concentrator transmitting program data comprising information defining a sequence of program instructions to a remote meter.

The independent claims define that the information defining a sequence of program instructions update at least a portion of the programs stored in the program memory of the

remote meters. This is quite different from Argyroudis which fails to describe that the active scheduling of remote metering units updates a program memory in the remote metering units in accordance with received program data comprising information defining a sequence of program instructions. In Argyroudis, the sequence of instructions in the program memory of the remote meter's microprocessor remains unaltered and unaffected by the scheduling messages.

The Examiner admits that Argyroudis's meter reading commands are not program instructions for updating a program stored in the remote units and relies on Holowick. In Holowick, the IR programming module 42 for remote programming procedures follows an entirely different philosophy than the claimed approach which carries out a program update of a remote meter via the concentrator "successively transmitting program data messages each comprising a portion of said program data." The programming module 42 adjusts "operating parameters of the controller...for instance...the predetermined time interval between transmissions of the modulated data signal." Col. 2, lines 60-65. The Examiner appears to be relying on the text bridging columns 2 and 3: "The programming module comprises a transceiver adapted to provide data to a diagnostic and programming device indicative of operating characteristics of the device, including any changes of device performance, battery levels, and further allowing the reception of data such as to update of internal software via downloading through the transceiver when desired." The updating of the internal software operation is not clear in this sentence and is not further explained in Holowick.

Nor does the updating of "internal software" teach program data comprising information defining a sequence of program instructions. Software could simply be data. Indeed, that is all that Holowick describes as quoted from col. 2, lines 60-65 above and at col. 6, lines 27-31: "Different messages carry and combine different data items. Data items include network ID,

cumulative meter reading, clock time, battery voltage, sensor tamper, sensor diagnostic, and trickle flags.” Program instructions are not described.

The Examiner admits that Holowick’s programming module 42 is not a concentrator. Nor does Holowick have any incentive to replace the IR programming module 42 with a concentrator. It not understood how Clarke’s general reference at page 7, lines 1-5 that a household appliance could be remotely sent a software update overcomes this deficiency in Holowick. How is this a teaching of the missing concentrator? The Examiner should note that the PCT Examiner cited o Clarke as an “A” type, background only type document in the International Search Report which is not surprising given that Clarke remedy the deficiencies of Argyroudis and Holowick. Also, there is no reason in Holowick to structure the information exchanged through the IR interface such that the program data are transmitted in the form of a succession of program data messages each comprising a portion of the program data.

Even if the proposed combination could be made, it would not lead to the subject matter claimed. The combination fails to teach “transmitting program data including information defining a sequence of program instructions” by “successively transmitting program data messages each comprising a portion of said program data.” The scheduling messages in Argyroudis are neither described nor required to be transmitted in a sequence of program data messages each comprising a portion of the program data. Holowick also does not disclose this feature.

None of the applied references specifically addresses and solves the problems to which the claims are directed. The inventors recognized that in a system for remote metering the consumption of utilities with a concentrator communicating with remote meters in order to collect the measured consumption data and perform tasks related to the administration of the

remote meters, there is a need to update program memory in the remote meter which stores executed by a remote meter computer controller. For example, the utility distribution network operator may desire to amend or extend customer services which require the support of the remote meter at the customer premises. Given the large number of customers typically served by a utility distribution network, a computer program update for a large number of remote meters can be costly, laborious, and time-consuming. None of the references address this specific need in this particular context to update the program instructions executed by host controllers of the remote meters in an efficient manner.

The courts have long found that the problem confronted by the inventors must be considered in an obviousness inquiry. See, e.g., *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 935 (Fed. Cir. 1990); *In re Spinnoble*, 405 F.2d 578, 585 (CCPA 1969) ("[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the 'subject matter as a whole' which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103.").

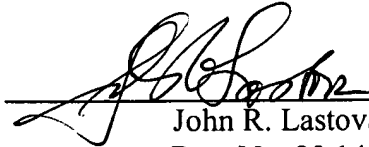
The application is in condition for allowance. An early notice to that effect is requested.

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Appl. No. 10/564,749
April 28, 2008

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